



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,470	03/09/2000	Hiroshi Katakura	000267	3147

23850 7590 05/06/2004

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

DO, CHAT C

ART UNIT	PAPER NUMBER
----------	--------------

2124

17

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/522,470

Applicant(s)

KATAKURA ET AL.

Examiner

Chat C. Do

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/8/2004; 2/26/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,8 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1,2,8 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment C, filed 01/08/2004.
2. Claims 1-2, 7-8, and 13 are pending in this application. Claims 1-2, 7, and 13 are independent claims. In Amendment C, claim 7 is amended and claim 14 is cancelled. This action is made non-final after a Request for Continued Examination filed 02/26/2004.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 8, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (Re. 34,363).

Re claim 1, Freeman discloses in Figure 2 a logic circuit comprising: a first inversion section (21) for inverting a first input signal (A) having one of positive logic and negative logic and outputting the inverted signal (bar(A)); a second inversion section (22) for inverting a second input signal (B) having the other the positive logic and the negative logic and outputting the inverted signal (bar(B)); and a transmission section (transmission lines that connect all signals to 23-26) for selectively outputting one of the inverted first input signal of first inversion section (output controls by C2 and bar(C2)) and the inverted second input signal of second inversion section (output controls by C3

and $\bar{C3}$) in accordance with a logical value which depends upon an externally controllable selection signal (Cs) and an inverted signal of the selection signal (\bar{Cs}).

Re claim 2, Freeman discloses in Figure 2 a logic circuit (a portion of Figure 2) comprising a first inversion section (21) for inverting a first input signal (A) and outputting the inverted signal (\bar{A}); a second inversion section (22) for inverting a second input signal (B) and outputting the inverted signal (\bar{B}); a first outputting section (output of 25) for selectively outputting one of the output of first inversion section (\bar{A}) and the output of second inversion section (\bar{B}) in accordance with a logical value which depends upon an externally controllable first selection signal ($C1$) and an inverted signal of the first selection signal (\bar{A}); and a second outputting section (output of 24) for selectively outputting one of the output of first inversion section and the output of second inversion section in accordance with a logical value which depends upon an externally controllable second selection signal and an inverted signal of the second selection signal (\bar{B} and $C3$).

Re claim 8, Freeman further discloses in Figure 2 comprising a first switching section (area including transmission lines of A , \bar{A} and $C2$, $\bar{C2}$) provided on an input side of first inversion section (21) and capable of performing switching of whether the first input signal should be passed (on) or blocked (off) in accordance with an external control signal ($\bar{C2}$); and a second switching section (area including transmission lines of B , \bar{B} and $C3$, $\bar{C3}$) provided on an input side of second inversion section (22) and capable of performing switching of whether the second input signal should be passed (on) or blocked (off) in accordance with the external control signal ($\bar{C3}$).

Re claim 13, Freeman further discloses in Figure 2 a first inversion section (21) for inverting a first input signal (21) having one of positive logic and negative logic and outputting an inverted first input signal (\bar{A}), first inversion section (21) being essentially composed of transistor circuits (col. 4 lines 45-55) each of transistor circuits having a first input signal terminal (input of 21) for the first input signal (A), a first input selection signal terminal (e.g. 29c) for the controllable selection signal (e.g. C1) and an outputting terminal (input to 23) for outputting the selection signal (C2) or the inverted signal ($\bar{C2}$) based on the logic of the first input signal (A); a second inversion section (22) for inverting a second input signal (B), second inversion section (22) being essentially composed of transistor circuits each (col. 4 lines 45-55) of transistor circuits having a second input signal terminal (input to 22) for the second input signal (B), a second input selection signal terminal (e.g. 29d) for the controllable selection signal (e.g. C0) and an outputting terminal (input to 25) for outputting the selection signal (C3) or the inverted signal ($\bar{C3}$) based on the logic of the first input signal; and a transmission section (all the connection bus between inverters to other logic components) for selectively outputting one of the output of first inversion section (21) and the output of second inversion section (22) in accordance with a logical value which depends upon an externally controllable selection signal (C2 and C3) and an inverted signal of the selection signal ($\bar{C2}$ and $\bar{C3}$).

Allowable Subject Matter

5. Claim 7 is allowed.

Response to Arguments

6. Applicant's arguments filed 01/08/2004 have been fully considered but they are not persuasive.

a. The applicant argues in page 7 for claim 1 second paragraph that it is clear from the claim language the second input signal is the opposite logic as the first input signal.

The examiner respectfully submits that the claim language does not obviously state nor inherently state that the second input signal is the opposite logic as the first input signal.

b. The applicant argues in page 7 for claim 1 fourth paragraph that the selection signals of the cited reference do not serve the same functions as explained in the paragraph bridging page 28 line 9 and page 29 line 6 of the written specification in the present invention.

The examiner respectfully submits that based claim language does not disclose or teach the functions as explained in the paragraph bridging page 28 line 9 and page 29 line 6 of the written specification. Therefore, the disclosed selection signal in the cited reference clearly meets the selection signal cited in the claim.

c. The applicant argues in page 9 second paragraph for claim 8 that the reference does not the first switching section and the second switching section as seen in Figure 1 of the present invention.

The examiner respectfully submits that based on the claim language, the cited reference clearly disclose the first switching section (e.g. C2 and /C2) and the second switching section (e.g. C3 and /C3).

- d. The applicant argues in page 10 for first paragraph claim 13 that the cited reference does not disclose two transistors as shown in Figure 1 of the present application.

The examiner respectfully submits that the cited reference clearly discloses as seen in Figure 2 two transistor circuits for converting the input signal and being controlled by selection signal.

In general, the claim language does not disclose precisely and uniquely the limitations in Figures 1-2 and 20 as applicant tried to argue. Therefore, the cited reference clearly discloses all the limitations in the claim of the present application and rejected clearly as cited above in the rejection purely based on the claim language.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (703) 305-5655. The examiner can normally be reached on M => F from 7:00 AM to 4:30 PM.

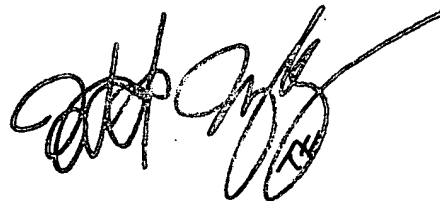
Art Unit: 2124

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do
Examiner
Art Unit 2124

April 20, 2004

A handwritten signature in black ink, appearing to read 'TODD INGBERG', with a long, sweeping horizontal line extending to the right.

TODD INGBERG
PRIMARY EXAMINER